



# CONSUMER ATTITUDES TOWARDS DOMESTIC SOLAR POWER SYSTEMS

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## ABSTRACT

Solar power system is the most gladly available source of power And it devices are launched mostly with the purpose to create environmental wakefulness of host power consumption and the need to preserve power using solar power devices like Solar Photovoltaic systems and other devices – such as street lights, garden lights, corridor lights, bill boards, rooftop systems etc. Solar power is an modernization in the India but the current policy of moving the market with grants is not resulting in general adoptions of solar power were surveyed and the results show that overall, Although the 'untimely majority' demonstrate a positive examination of the environmental characteristics of solar power, its financial, economic and visual characteristics are limiting adoption. There is considerable possibility for direct energy saving as well as energy generation through the installation of solar water heating and other renewable energy technologies. The main drawback of solar products is price. Hence the study examines the awareness and usage of solar products among women graduates.

**KEY WORDS:** Solar power, photovoltaic, modernization adoption.

## INTRODUCTION:

The economic growth of any nation depends upon the development of trade, Commerce, industry and other related activities. Solar power is a essential resource which is required for the development of an economy; India is one of the fastest growing countries in terms of power consumption. Solar power is the instant source of energy. Three of the fastest growing sun based technologies are solar thermal, concentrating solar power (CSP) and photovoltaic. This solar power can be used in many ways, such as domestic lighting/ heating/cooking, street light, electricity /power generation, water pumping, powering of remote telecommunication etc.

The International Energy Agency estimates that India is the world's fourth largest energy consumer after United States, China and Russia and will be the third largest by 2030. At the same time, the country is heavily reliant on fossil sources of energy for most of its demand, but out of control use of fossil coal based energy, poses a warning to sustainable development by disturbing environment and impression consumption of non-renewable energy sources and depleting natural energy reservoirs through needless and unwarranted use has been one of the toughest challenges of the world. These energy challenges could be emphasized through effective consumption of renewable energies and necessitate the country to resolutely increase the usage of renewable energy sources like bio-energies, geothermal energy, small-hydro, solar and wind power. India has incredible potentialities to attach the much-needed energy from renewable sources and considered as one of the ideal investment destinations for renewable energy tackle manufacturers and service providers. India could become top participant in world's solar market, intends to make available a reliable power supply through a assorted and sustainable fuel mix that addresses major national drivers. These include protection concerns, commercial utilization of renewable.

## Statement of the problem:

In the present expansion the world is subject by the Electrical Energy and the Electronic devices. The technological enhancement in this countryside is endless and it plays a essential role in day to day life of people. Solar power mortal a renewable. Energy offered in great extent as the natural source sun emits Photovoltaic energy in the sun rays. Solar cells/ panels used to snatch solar energy and converts into electrical energy for convention. Many companies have come in to the market in the profit-making sales of solar energy based devices. In this view the study has been undertaken to locate the knowledge and usage of solar products.

## OBJECTIVES OF THE STUDY:

1. To know the consumers awareness towards solar power renewable energies
2. To understand the usage of solar power protection techniques
3. To study the reasons for choosing solar power.

## SCOPE OF THE STUDY:

Installation of solar power is optional by the government in all possible ways. The cost of solar power is reasonably low and very easy for fixing as it is manufactured by private group link DTH and other material ease of access and available in all places. Even the knowledgeable people and the who follow good standard

of living get distrust over the fitting of solar power in their house. to save the younger invention suffering from shortage of power it is an growing needs to create alertness among the public about the uses and safety of solar power system.

## LIMITATION OF THE STUDY:

The data was collected from consumer of solar power system in the domestic utility only. Hence the result of the research work may not be considered for framing any policies with regard to the consumer of solar power system in other sectors like industries, agriculture etc.

## REVIEW OF LITERATURE:

The research aims to analyze domestic consumers' energy usage and their Awareness towards renewable energies in Tamilnadu. The following are set as the Project Team (2002)<sup>4</sup> for “non- conventional sources of Energy in Tamilnadu” stated that belief on coal and oil has soared at a exceptional rate over the years. The scalded fuels result in the liberate of carbon dioxide and other gases into the feel causing environmental scratch. It has become Critical to look at energy expertise with a new point of view there are Profuse renewable sources of energy such as wind, sun, water, sea, biomass apart from even daily wastes. These sources are contamination free and hence clean energy A part from organism unlimited/ boundless Power generation in India has grown in size to around 1 lakh MW and in Tamil Nadu it has improved to 7924 MW which is distributed in the course of a infinite network of communication sub-transmission and allotment lines that reach all villages even in secluded areas. The demand for power is growing quickly. Tamilnadu ranks first in the country in Wind power with a capacity of 858 MW out of an estimated potential of 3050 MW. In biomass power the country has an installed capacity of 381 MW out of total potential of 19500 MW. There is significant extent for going up this activity with proper Incentives.

Dr. M. Venkatraman and U. Sheeba (2014)<sup>1</sup> in their study on “Consumer Attitude towards Solar Energy Devices” have considered the knowledge of the solar energy approach and the opinion, preferences and position among respondents. They also examined consumer fulfillment and consumer attitude regarding CRM practices of Manufacturers of solar energy devices. Customer's thoughts towards solar energy devices is definitely changing and there has been a considerable increase in the awareness and completion of using solar energized devices over electrical devices and also raise the consumer's dependability towards the environment and eco-sociability.

## METHODOLOGY:

This study is based on Primary data collected from 50 respondents by means of a prepared questionnaire. Unsystematic sampling procedure was useful and arithmetical tackle like Percentage Analysis and Chi-Square were carried out to explore the data.

## Analysis and Interpretation:

- Majority (40%) of the respondents belong to the age group of 36 – 40 years So The popular of the respondents are in the age group of 36 – 40 years.
- 88% of the respondents belong to nuclear family and 20% of them belong to joint family. Hence, majority of the respondents belong to nuclear family.

- Majority (70%) of the respondents have a family monthly income of Rs. 30,000 to Rs. 40,000, Hence, majority of the respondents have a family monthly income of Rs. 30,000 to Rs. 40,000.
- 100% of the respondents are aware about solar power system.
- 78% of the respondents are aware about solar water heater, solar street light and solar fan light, hence, majority of the respondents are aware about solar water heater, solar street light and solar fan light.
- 40% of the respondents are aware about the solar products through their friends Hence, majority of the respondents are aware about solar power through their friends.
- 44% of the respondents are using solar products for 2-3 years, Hence, majority of the respondents are using solar products for 2-3 years.
- 100% of the respondents are willing to purchase solar products in future.
- 100% of the respondents are satisfied about the solar power system
- 50% of the respondents purchase solar products by cash hence, majority of the respondents have purchased solar products by paying cash.

#### Chi-Square Test:

- Chi- square test is used to study the relationship between the Age of the respondents with Factors influencing the purchase of solar products, method of purchase, and Sources of awareness about solar Power system.
- Hence, the null hypothesis is rejected leading to the conclusion that there is significant relationship between the age of respondents and factors influencing the buying of the solar products.
- Hence, the null hypothesis is rejected and there is significant relationship between the age of respondents and mode of purchase of solar products
- Hence, the null hypothesis is rejected and there is significant relationship between the age of respondents and mode of source of awareness about the solar products.

#### CONCLUSION:

The study on "*CONSUMER ATTITUDE TOWARDS DOMESTIC SOLAR POWER*" in Coimbatore helped in identifying their accepting about solar power system, the cause of in order about solar power system and their view about solar power system. Most of the consumers are alert about solar power system in the course of their friends and most of them using. Solar power system ensures the green quality of products. There is major scope in potential for direct energy through the mechanism of solar power system Today the firms are sentient regarding the adoption and implementation of solar products in their production route products and the equivalent.

#### REFERENCES:

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